

**CALIFORNIA WILDLIFE HABITAT RELATIONSHIPS SYSTEM**  
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B145 Virginia Rail *Rallus limicola*  
Family: Rallidae Order: Gruiformes Class: Aves

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#### DISTRIBUTION, ABUNDANCE, AND SEASONALITY

A fairly common resident in California. In summer, breeds in fresh emergent wetlands and wet meadows the length of the state. Concentrated in the Great Basin from Inyo Co. north to the Oregon border, the Central Valley, and the San Francisco Bay area. Also nests sparingly north near the coast to Mendocino and Humboldt cos., and in south coastal areas from San Luis Obispo Co. to the Mexican border, as well as in the Imperial and Colorado River valleys. In winter, migrates from the northeastern plateau to lowland portions of the range. Occurs in saline emergent wetlands in the nonbreeding season, but apparently not while breeding (McCaskie et al. 1979, Garrett and Dunn 1981). Destruction of marshes has reduced numbers in coastal southern California (Garrett and Dunn 1981), and elsewhere (Grinnell and Miller 1944). Vagrant individuals observed on South Farallon Island in September, 1968, and 1971 (DeSante and Ainley 1980), and there are 5 fall/winter records from the Channel Islands (Garrett and Dunn 1981).

#### SPECIFIC HABITAT REQUIREMENTS

**Feeding:** Feeds in tall, emergent vegetation by probing in mud and wading in shallow water. Searches the ground and plant stems for adult insects and larvae, slugs, snails, crustaceans, and worms (Terres 1980). In autumn, eats seeds of marsh plants (Cogswell 1977). Occasionally forages under, or well into, riparian shrubs, along marsh borders, or even swims into open water to snatch small fish. Rarely, feeds in dry, weedy fields. In Iowa marshes, 62% of the food was insects (Horak 1970).

**Cover:** Requires emergent vegetation at least 0.6 m (2 ft) tall for escape cover.

**Reproduction:** Breeds in cattails, bulrushes, and other emergent vegetation in freshwater marshes. Areas may be quite small, but must have some open water and tall, emergent vegetation to support a nesting pair (Grinnell and Miller 1944). Nests on the ground, hidden by vegetation, suspended between stems above water, or perched on grass tussocks (Harrison 1978).

**Water:** No additional data found.

**Pattern:** Occurs at all seasons in freshwater habitats with tall, emergent vegetation. In winter, also frequents saline emergent wetlands where it can be observed best during high tides (Cogswell 1977).

#### SPECIES LIFE HISTORY

**Activity Patterns:** Active yearlong. Activity difficult to observe because of secretive behavior and dense cover. As with most rails, it is most easily detected by its distinctive calls,

which are given day and night (Terres 1980).

**Seasonal Movements/Migration:** Permanent resident in lowland, freshwater habitats, but Great Basin breeding population migrates south or west for the winter. Most winter visitors to coastal California leave these areas in summer. Primarily migrates at night by flying low over water or level ground (Bent 1926), but probably higher above rougher terrain.

**Home Range:** In Michigan, Berger (1951) found 5 nests of this species and 4 nests of the sora, all active simultaneously in a 0.2 ha (0.5 ac) marsh bordering a wooded swamp. Two of the Virginia rail nests were 11 m (33 ft) apart.

**Territory:** Both Walkinshaw (1937) and Kaufman (1971) reported territorial behavior, but did not give extent of defended space. Sketch maps by Glahn (1974) of 18 territories in Colorado suggested sizes ranging from 520-3080 m<sup>2</sup> (5600-33,150 ft<sup>2</sup>), with a mean of about 1370 m<sup>2</sup> (14,750 ft<sup>2</sup>).

**Reproduction:** Typically breeds April to June, but young have been noted as late as August (Cogswell 1977). Clutch size 5-12 eggs, and may be double-brooded occasionally. Incubation 14-16 days (Mousley 1937), but up to 19 days (Cogswell 1977), and both sexes incubate. Precocial young fed by parents even after fledging (Harrison 1978).

**Niche:** Heavy grazing of wetlands and wet meadows can be very detrimental.

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